Chapter 1
Purpose of and Need for Action

Chapter 1
Purpose of and Need for Action

Need for Action

Bonneville Power Administration (Bonneville) is a federal agency that owns and operates more than 15,000 miles of high-voltage transmission lines. The transmission lines move most of the Northwest's high-voltage power from facilities that generate the power to power users throughout the region and to nearby regions (e.g., north to Canada and south to California and Arizona). The facilities that generate the power include federally-owned dams on the Columbia River and private investor-owned facilities (gas-turbine, coal-fired, and wind-turbine facilities). Buyers of high-voltage power include electric utilities (public utility districts, municipalities, and investor-owned utilities) and direct service industries (e.g., aluminum plants). The electric utilities, in turn, provide electricity to homes, businesses, and farms. Bonneville also provides transmission service; generation facilities use this service by connecting to Bonneville's transmission system and using the transmission lines to send power to their buyers.

Presently, Bonneville is facing two problems regarding power flow on the system: there is not enough electricity being generated to meet demand, and many of Bonneville's transmission lines are now at capacity and cannot carry more power. To solve the problem of lack of power, private investors have proposed and are developing gas-fired and wind-powered generation facilities. Many of these facilities are in southeast Washington and northeast Oregon (see Figure 1-1 for locations and the section on Other Projects or Documents at the end of this Chapter for descriptions). This is a prime area for power generation because of sufficiency of wind or access to gas pipelines, as well as access to high voltage transmission lines. The newly generated power from these facilities will need to be transmitted to the west side of the Cascades because there is a high demand for electricity from the west side's urban areas. However, the existing transmission lines connecting southeast Washington and northeast Oregon to the west side of the Cascades are at or near capacity.

Bonneville has a statutory obligation to ensure that there is sufficient capacity and reliability in Bonneville's transmission system. The Federal Columbia River Transmission Act directs Bonneville to construct additions to the transmission system that are required to provide interregional transmission facilities [16 U.S.C. § 838b(c)]. In addition, the Act directs Bonneville to construct additional transmission lines that are

necessary to integrate and transmit electric power from new Federal and non-federal generating sources [§ 838b(a)]. Finally, the Act directs Bonneville to construct additional transmission lines necessary for maintaining the electrical stability and reliability of the transmission system [§ 838b(d)]. The proposed action is needed to comply with these Congressional mandates.

In order to help ensure that existing and newly generated power can move east to west through the system, Bonneville needs to increase the capacity of its transmission system between the McNary and John Day Substations.

Need for Power

As recognized by the National Energy Policy report submitted by Vice President Cheney on May 16, 2001, resolution of the Western energy crisis requires development of new generation resources. About 1,000-megawatts (MW) of generation currently under construction have contracted for wheeling (transferring power) over the Bonneville system. An additional 3,000-MW of new generation is proposed to be online by 2004 and developers for nearly 30,000-MW of generation have requested interconnection. While many of these plants will likely not be built, regional studies have identified a shortfall of about 3,000-MW by 2004 (based on regional load and generation resource forecasts). Most proposed new generation resources cannot obtain firm transmission service, or be integrated into the regional power system, without additional transmission investment.

Two of the generation facilities proposed in this area are the Starbuck Power Project (near Starbuck, Washington), and the Wallula Power Project (near Wallula, Washington). These gas-turbine facilities would generate a total of 2,500-MW of power. The new transmission line would be necessary to allow the power from these facilities to integrate into the transmission system and would allow Bonneville to grant "firm" transmission service to these facilities. (Firm transmission service is reserved or scheduled availability of the transmission line for sending generated power for a specific term—usually a year or longer.) If either the Starbuck or Wallula generation projects fail to be built, there are other proposed facilities in the area that would be able to utilize the line.

Transmission Infrastructure

Portions of the Northwest transmission system are approaching gridlock. An adequate and affordable electric supply is not possible without sufficient transmission capacity. Bonneville has a number of transmission paths that experience chronic electrical congestion, which requires that Bonneville reduce the amount of power that is delivered on the system (curtailment of both firm power deliveries and economy energy). The amount of power loads (power being transmitted and sold) has been growing steadily at 1.8% annually, and the use of the transmission system is up by over 2% annually, but very few bulk grid transmission lines have been added in the last 15 years. Bonneville has kept up with increasing transmission demands through substation upgrades, conservation, and other non-wire solutions; however, the system is beyond its limits for these fixes.

Decisions to be Supported by the EIS

Bonneville will use the information contained in this environmental impact statement (EIS) and comments from the public to make the following decisions.

- Bonneville must decide whether or not to build the proposed McNary-John Day transmission line (see Chapter 2 for descriptions of the transmission line and short-line routing alternatives).
- If the decision is to build the new transmission line, Bonneville must choose among the short-line routing alternatives analyzed in this EIS (at the McNary Substation, the Hanford-John Day Junction, Corridor Mile 32, and Corridor Mile 35).
- If the decision is to build a new transmission line, Bonneville would determine the exact locations of the towers and access roads and chose among the mitigation measures identified in this EIS.

Purposes

While meeting the need to increase the capacity of the transmission system in this area, the proposed action has other purposes (or objectives). Bonneville intends to base its decisions on the following objectives:

- maintenance of transmission system reliability;
- consistency with Bonneville's environmental and social responsibilities; and
- cost and administrative efficiency.

Cooperating Agencies

The U.S. Army Corps of Engineers (Corps), the U.S. Bureau of Land Management (BLM), the U.S. Fish and Wildlife Service (USFWS) and the Bureau of Indian Affairs (BIA) are cooperating agencies in the development of this EIS. The proposed transmission line would cross a Corps Wildlife Natural Area near the McNary Substation and would cross the Columbia River twice. (The Corps has permitting jurisdiction of crossings over navigable rivers. See permits and requirements in Chapter 4.) The proposed transmission line crosses three BLM parcels and two tribal allotments (the BIA is responsible for negotiating easements for tribal allotments). The USFWS manages the Umatilla Wildlife Refuge adjacent to the transmission line corridor and will make findings and opinions regarding impacts to threatened and endangered species. As cooperating agencies, the Corps, BLM, USFWS, and BIA will make sure that the EIS and the proposal meet their requirements for allowing easements or findings as appropriate. See Appendix A for correspondence with coordinating agencies.

Scoping and Major Issues

Early in this environmental process, Bonneville contacted people who may be interested in or affected by the proposed project to learn what issues should be studied in the EIS. Because these issues help define the scope of the EIS, this process is called "scoping."

In scoping this EIS, Bonneville contacted people who lived along or near the proposed transmission line route, federal, state, and local agencies who manage lands or have other jurisdictions along the route, Indian tribes with interests in the area, and interest groups. Comments were sought and received in a number of ways:

- A Notice of Intent to prepare an EIS was published in the federal register May 2001;
- A letter, map, and comment form packet was mailed in May 2001 to about 420 people; and
- Two public scoping meetings were held—one in Paterson, Washington on May 23, 2001, and another in Roosevelt, Washington on May 24, 2001.

During scoping, Bonneville received about 350 comments. Most of the comments (45%) focused on potential impacts of the new transmission line. Bonneville also received many comments and questions on why it needs to build the line, alternatives to building the line, where the line would go, and what would it look like.

The three topics that drew the most comments about impacts included

- land use (passing through orchards and vineyards, cattle grazing, etc.),

- vegetation (mostly noxious weed concerns, some clearing concerns), and
- fire (concerns about workers starting brush fires).

Other comments on impacts involved cultural resources, social impacts, economic, noise, public health and safety, soils, visual, water, and wildlife. A letter was mailed (August 2001) to interested parties that summarized scoping comments and identified next steps in the EIS process.

See Appendix B for public involvement mailings and a summary of scoping comments for this project.

Other Projects or Documents Related

Below are brief descriptions of generation projects proposed in the area and a document incorporated by reference into this EIS.

To receive a copy of one of these documents or to be put on the mailing for a project, call Bonneville's toll-free document request line at 1-800-622-4520 and leave a message (please include the name of the project and a complete mailing address). If the project is posted on Bonneville's website, it can be accessed at www.efw.bpa.gov under the section on environmental planning/analysis.

Wallula-McNary Transmission Line Project and Wallula Power Project

The Wallula Power Project is a 1,300-MW natural gas-fired generation facility proposed by Newport Northwest, LLC (Newport Northwest) that would be located near Wallula in Walla Walla County, Washington. Newport Northwest has requested an interconnection and upgrade to Bonneville's transmission system; a new substation and a 35-mile transmission line coming into McNary Substation would be required. Bonneville proposes to execute an agreement with Newport Northwest to provide the interconnection and firm power transmission. A joint state and federal EIS is being developed on the project. The proposed McNary-John Day transmission line would allow electricity generated from the Wallula project to flow into the transmission system.

Starbuck-Lower Monumental Dam Transmission Line Project and Starbuck Power Project

The Starbuck Power Project is a 1,200-MW natural gas-fired generation facility proposed by Starbuck Power Company, LLC that would be located near the town of Starbuck in Columbia County, Washington. Starbuck Power Company has requested an interconnection and upgrade to Bonneville's transmission system (a 16-mile transmission line would be required). A joint state and federal EIS is being developed on the project.

The proposed McNary-John Day transmission line would allow electricity generated from the Starbuck project to flow into the transmission system.

Umatilla Generating Project

The Umatilla Generating Project is a 550-MW natural gas-fired generation facility proposed by Umatilla Generating Company, LP, that would be located about 4 miles southwest of the city of Hermiston near the existing Hermiston Generating Plant. The company has requested an interconnection and upgrade to Bonneville's transmission system into the McNary Substation that would allow firm power delivery to the wholesale power market. A draft EIS on this project was made available for public review on August 15, 2001.

Mercer Ranch

The Mercer Ranch Project is an 850-MW natural gas-fired generation facility proposed by Cogentrix Energy, Inc., that would be located adjacent to the proposed McNary-John Day transmission line in Benton County, Washington. A joint state and federal EIS is being developed on the project. The proposed McNary-John Day transmission line would allow electricity generated from the Mercer Ranch project to flow into the transmission system. As part of the Mercer Ranch Project, a new substation would be built next to the right-of-way described in this EIS, and the proposed McNary-John Day transmission line would go in and out of that substation. The potential impacts of building the substation would be analyzed in the Mercer Ranch Project EIS.

Wanapa Energy Center

Wanapa Energy Center is a 1,000-MW natural gas-fired power generation facility proposed by the Confederated Tribes of the Umatilla Indian Reservation (Umatilla Tribes) and others. The Wanapa Energy Center would be located on tribal-owned land in Umatilla County, Oregon, near McNary Dam. The Umatilla Tribes have requested interconnection with Bonneville's transmission system at McNary Substation. The Bureau of Indian Affairs has published a Notice of Intent to prepare an EIS for this project, and Bonneville will participate as a cooperating agency.

Cliffs Energy Project

Cliffs Energy Project is a 225-MW natural gas-fired power generation facility that would be located adjacent to the Goldendale Aluminum Company smelter near the proposed McNary-John Day transmission line in Klickitat County, Washington. Klickitat County prepared a state environmental review of the proposal.

Plymouth Generating Facility

The Plymouth Generating Facility is a 306-MW natural-gas-fired generation facility proposed by Plymouth Energy, L.L.C. that would be located near the town of Plymouth, Benton County, Washington. The company has requested an interconnection to Bonneville's transmission system that would allow firm power delivery to the wholesale power market. A joint state and federal EIS will be developed on the project.

Wind Projects

Some of the wind generation projects either being built or proposed in the general area include Stateline Wind Project (300-MW), Horse Heaven Hills (150-MW), Waitsburg (100-MW), Roosevelt (150-MW), Six Prong (150-MW), Columbia Wind Ranch (80-MW), Condon (50-MW), Summit Ridge (50-MW), Vansycle Wind Project, and Wheat Field (150-MW). The locations of these proposed wind projects is shown in Figure 1-1.

Bonneville's Vegetation Management Program

The vegetation management for this proposed project would be guided by the decisions and protocols developed in Bonneville's Transmission System Vegetation Management Program EIS (June 2000). The Vegetation Management EIS is incorporated by reference, and relevant information is summarized in this EIS. (See the section on Maintenance, Chapter 2, for more information on vegetation management for the proposed transmission line.)

How this EIS is Organized

Figure 1-2 shows how this EIS is organized. In addition to this chapter on purpose and need for action, there are chapters on the project proposal and alternatives; affects, consequences, and mitigation; and review and permits. This EIS also includes various reference and appendix materials.

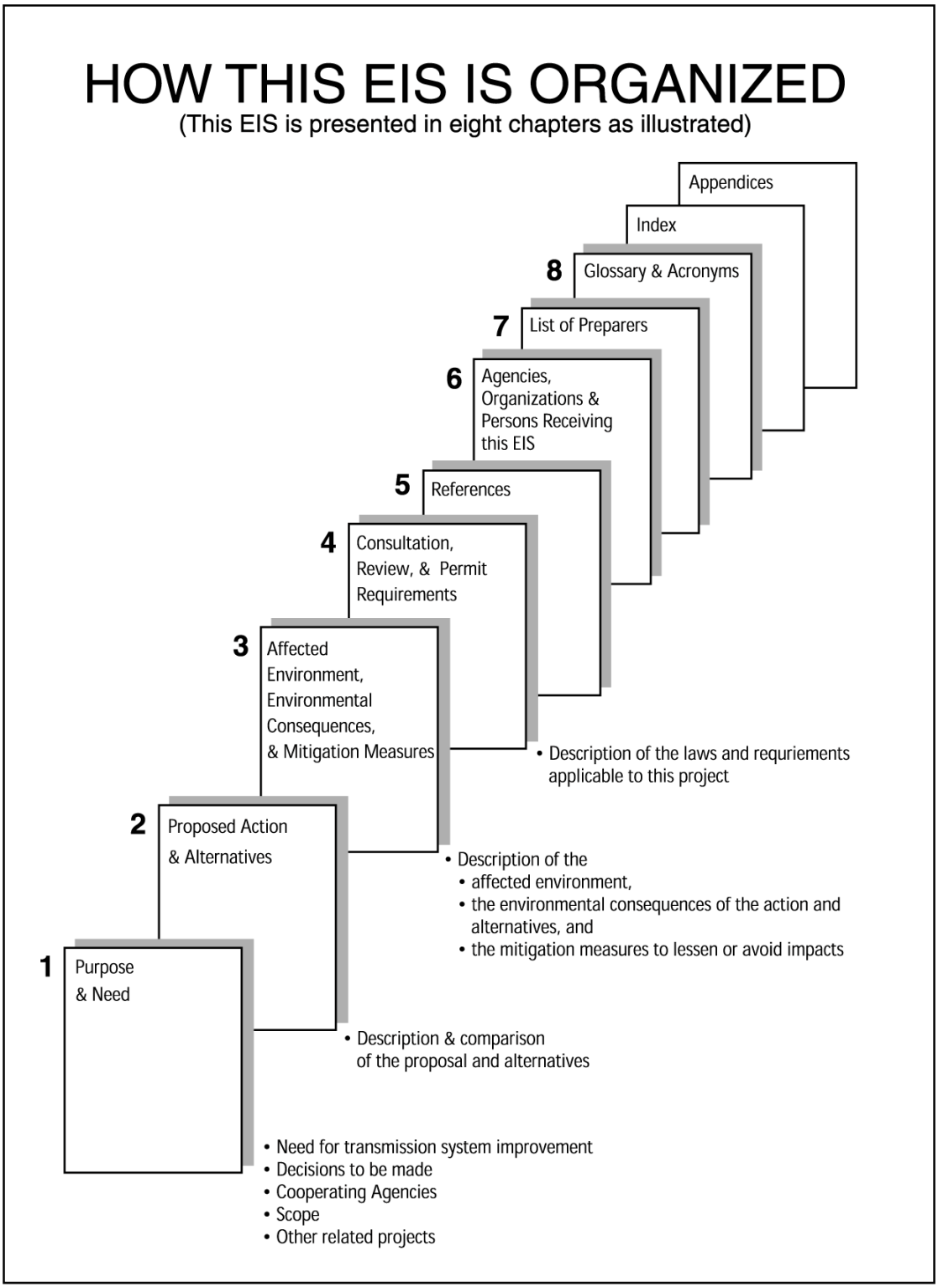

Figure 1-2: How this EIS is Organized